

# UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/622,382 01/12/01 SAUNDERS 8 206008 **EXAMINER** MMC2/0508 LEYDIG VOIT & MAYER CLINGER, J ART UNIT PAPER NUMBER TWO PRUDENTIAL PLAZA SUITE 4900 180 NORTH STETSON CHICAGO IL 60601-6780 2821 DATE MAILED: 05/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 



# Office Action Summary

Application No. **09/622,382** 

Jim Clinger

Applicant(s)

Examiner

Group Art Unit 2821

Saunders et al.

X Responsive to communication(s) filed on Aug 16, 2000	
☐ This action is <b>FINAL</b> .	
☐ Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay@35 C.D. 11; 453 O.G. 213.	as to the merits is closed
A shortened statutory period for response to this action is set to expire three_ month(s), or longer, from the mailing date of this communication. Failure to respond within the period for response application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under 37 CFR 1.136(a).	onse will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s)is/ar	e withdrawn from consideration
☐ Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	is/are objected to.
Claims are subject to res	striction or election requirement.
Application Papers  See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.	
☐ The drawing(s) filed on is/are objected to by the Examiner.	
☐ The proposed drawing correction, filed on is ☐ approved ☐ dis-	approved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	•
🕅 All Some* None of the CERTIFIED copies of the priority documents have been	
X received.	
<ul> <li>□ received in Application No. (Series Code/Serial Number)</li> <li>□ received in this national stage application from the International Bureau (PCT Rule 1</li> </ul>	
*Certified copies not received:	7 .2(a)).
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	
Notice of References Cited, PTO-892	
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s)	
☐ Interview Summary, PTO-413	
<ul> <li>□ Notice of Draftsperson's Patent Drawing Review, PTO-948</li> <li>□ Notice of Informal Patent Application, PTO-152</li> </ul>	
L. House of Illionnai'r atent Application, i' 10-102	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

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#### **DETAILED ACTION**

#### Claim Objections

1. Claim 7 is objected to because of the following informalities: this claim recites phrases which are enclosed in parenthesis. Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 6-7, 12, 14-15 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, no antecedent basis for "the control means".

Claims 6-9, no antecedent basis for "the detecting means" and "the control means".

Claim 12, the preamble contains the phrase "each feed network" while there is only a single feed network in the independent claim.

Claims 14-15, these claims are vague because the meaning of the limitation "n" is not clear.

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Claim 18, the limitation "generally" is vague because its meaning is not clear. A better limitation may be "substantially".

Claims 19-20, no antecedent basis for "weighting circuit".

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 6-11, 13 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 6-11 and 13, a detection means as recited is not sufficiently described in the specification.

Claims 10-11, memory and A/D conversion are not sufficiently described in the specification.

Claim 18, the recited cross sectional shape is not described in the specification.

## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 12 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tassoudji et al.(5,828,348).

Figure 13 discloses a dual band octafilar helical antenna with four radiators at a first frequency(1304) and four interleaved radiators at a second frequency(104) on a substrate(108) with a feed network as recited(900 and 1100).

### Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 2-11, 13-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tassoudji.

The following recited elements are disclosed in different embodiments of the invention by Tassoudji which results in a dual frequency antenna which is small(abstract).

Tassoudji discloses all of the elements of the claimed invention, but the elements disclosed in Tassoudji are part of different embodiments as opposed to applicant's invention which recites all of the elements in a single embodiment.

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Claim 2, a microstrip substrate(col. 5, lines 31-32) is disclosed.

Claim 3, control means(fig. 14, no. 1404) are disclosed.

Claims 4-5, switching means(fig. 22, no. 308) as recited are disclosed.

Claims 6-11 and 13, figure 23 discloses detection means(receive).

Claim 18, an elliptical helix is well known in the art.

Claims 19-20, the disclosed circuit can operate at the recited frequencies.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the elements from the different embodiments of the invention disclosed in Tassoudji to obtain dual frequency operation with a small device as disclosed in Tassoudji.

#### Correspondence

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Clinger whose phone number is (703) 305-0619.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

Supervisory Patent Examiner Technology Center 2800

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